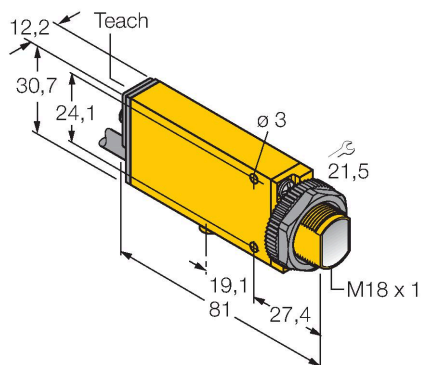


SM2A312C2QD

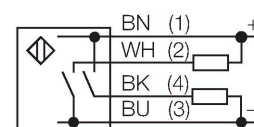
Photoelectric Sensor – Convergent Mode Sensor



Features

- Cable, PVC, 2 m
- Protection class IP67
- Sensitivity adjustable via potentiometer
- Alignment indicator
- Operating voltage: 24...240 VAC
- Switching output, bipolar
- Light/dark operation

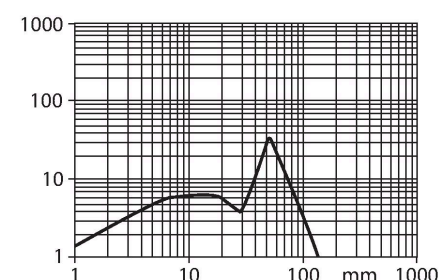
Wiring diagram



Functional principle

Convergent mode sensors are equipped with a lens in front of the emitter diode that produces a small and intense focal point at a defined distance from the sensor. Similar to diffuse mode sensors, the light reflected by the target is evaluated. Convergent mode sensors are ideal for detection of small targets or colour marks and edge guiding or positioning control of transparent materials. The targets must always be within the focal depth of the sensors. The focal depth is defined as the area in front of or behind the focal point within which the object can be detected. Based on the intense light concentration in the focal point, convergent mode sensors are capable of detecting targets with a low reflectivity.

Excess gain curve
Excess gain in relation to the distance



Technical data

Type	SM2A312C2QD
ID no.	3027628
Optical data	
Function	Proximity switch
Operating mode	Convergent
Light type	IR
Wavelength	880 nm
Focal distance	43 mm
Range	43 mm
Electrical data	
Operating voltage	24...240 VAC
Output function	Relay output
Readiness delay	≤ 300 ms
Response time typical	< 4 ms
Setting option	Potentiometer
Mechanical data	
Design	Rectangular with thread, Mini Beam
Dimensions	Ø 18 mm
Housing material	Plastic, Thermoplastic material, Yellow
Lens	plastic, Acrylic
Electrical connection	Connectors, 1/2", PVC
Number of cores	3
Ambient temperature	-20...+70 °C
Protection class	IP67
Excess gain indication	LED
Tests/approvals	
Approvals	CE, cURus, CSA

Accessories

SMB18A	3033200	Mounting bracket, rectangular, stainless steel, for sensors with 18 mm thread
SMB18AFAM10	3012558	Mounting bracket, material VA 1.4401, for M10 x 1.5 thread, thread length 18 mm
SMB18SF	3052519	Mounting bracket, PBT black, for sensors with 18 mm thread, rotatable
SMB312B	3025519	Mounting bracket, stainless steel, for MINI-BEAM NAMUR
SMB3018SC	3053952	Mounting bracket, PTB black, for sensors with 18 mm thread